



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,606	12/02/2003	Shigeru Sakamoto	65933-057	8763

7590 08/09/2007
McDERMOTT, WILL & EMERY
600 13th Street, N.W.
Washington, DC 20005-3096

EXAMINER

MERCADO, JULIAN A

ART UNIT	PAPER NUMBER
----------	--------------

1745

MAIL DATE	DELIVERY MODE
-----------	---------------

08/09/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center">Office Action Summary</p>	<p>Application No.</p> <p align="center">10/724,606</p>	<p>Applicant(s)</p> <p align="center">SAKAMOTO, SHIGERU</p>	
	<p>Examiner</p> <p align="center">Julian Mercado</p>	<p>Art Unit</p> <p align="center">1745</p>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6,7,9-11,13,14,16,17,19 and 21-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6,7,9-11,13,14,16,17,19 and 21-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f):
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remarks

This Office action is responsive to applicant's amendment filed on May 24, 2007.

Claims 1, 3, 4, 6, 7, 9-11, 13, 14, 16, 17, 19 and 21-26 are pending.

Claim Rejections - 35 USC § 102

The rejection of claims 1, 11 and 27 under 35 U.S.C. 102(b) based on Makita et al. (U.S. Pat. 3,991,169) has been withdrawn.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3, 4, 6, 7, 9-11, 13, 14, 16, 17, 19 and 21-26 are rejected under 35 U.S.C. 103(a) as obvious over McCullough (U.S. Pat. 5,518,836).

The teachings of McCullough have been discussed in detail; all are applied for the reasons of record.¹

Firstly, the examiner notes applicant's amendment to the present claims now deleting the prior limitation of the gas diffusion layer being "processed with a flouoresin to attain water repellency. Accordingly, the present ground of rejection no longer relies on the teachings of

¹ In stating that rejections are maintained for the reasons of record, the examiner is merely incorporating by reference the prior detailed discussion of the cited references. As a matter of clarification, maintaining "the rejection based on McCullough as set forth under 35 U.S.C. 102(b)..." is only insofar as an anticipatory teaching is commonly accepted as being the epitome of obviousness.

Art Unit: 1745

Taniguchi et al. (U.S. Pat. 6,083,638) or applicant's admitted prior art, Taniguchi et al. (JP 10-289723). As applicant's amendment has effectively broadened the scope of protection sought, the present ground of rejection relies solely on the teachings of McCullough alone.

Secondly, the examiner notes the present amendment to claim 1 now reciting that gas is supplied from the surfaces of the first electrode and the second electrode opposite to the electrolyte membrane toward the electrolyte membrane. This limitation, while considered by the examiner, has not been given patentable weight, as it is more properly drawn to a process-of-using limitation which thus fails to further limit the claimed fuel cell device. Nonetheless, the examiner asserts that such operation of *any* fuel cell is *not* novel; see, for example, applicant's description of the related art on page 1 line 15 to page 2 line 15. It is noted that applicant's remarks do not appear to have any salient argument in regards to patentability based on the presently submitted claim language.

More significantly, applicant submits that McCullough does not teach the carbon fiber in the gas diffusion layer but instead teaches such fibers as part of the current collector. This argument is not persuasive. In numerous instances throughout McCullough's disclosure, the carbon fibers are specifically disclosed as being part of the electrode body—see, for example, col. 9 lines 60-65, col. 10 lines 10-15 and line 25 and col. 13 line 13 et seq. Indeed, the actual current collector in McCullough is mutually exclusive from the carbon fiber electrode, insofar as being comprised not of carbon fibers or anything else remotely organic but more so of elemental metals such as nickel, silver or gold, *inter alia*. See col. 18 lines 11-24.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian Mercado whose telephone number is (571) 272-1289. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Art Unit: 1745

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

A handwritten signature in black ink, appearing to be "jam" with a stylized flourish.A handwritten signature in black ink, appearing to be "Patrick Joseph Ryan" with a long, sweeping flourish.

PATRICK JOSEPH RYAN
SUPERVISORY PATENT EXAMINER